Center for Educational Performance and Information (CEPI)

Student Transcript and Academic Record Repository (STARR): Submitting Records to the STARR

Michigan Student Data System (MSDS) STARR User's Guide

Questions or comments about this document should be directed to:
Email: CEPI@michigan.gov
Phone: 517-335-0505, x3



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Introduction

This guide has been developed as part of a set of paper-based training materials for the Student Transcript and Academic Record Repository (STARR) Collection in the Web-based Michigan Student Data System (MSDS) application. This guide includes directions for gaining access to the MSDS and using the MSDS to upload files, perform UIC Resolution, download reports, view errors and warnings, perform quality review, certify the STARR Collection and use the additional functionality such as the Student Search feature.

Background

When Michigan representatives agreed to accept State Fiscal Stabilization Fund dollars under the American Recovery and Reinvestment Act, they also agreed to four education assurances. One of these assurances is that the state of Michigan will connect preschool through postsecondary (P-20) education data into the labor force to evaluate effectiveness of public education at preparing students for postsecondary education and the workforce. Connecting P-20 data requires that the student Unique Identification Codes (UICs) assigned and maintained by the Center for Educational Performance and Information (CEPI) be exchanged among institutions and used at all education levels. In order to fulfill these requirements, Michigan must collect and store each student's academic record in a data application for analysis. The application is called the MSDS. The collection of these data for IHEs is the STARR. The data collected have been developed into reports that are being published on the MI School Data site.

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Gaining Access to the MSDS for the STARR Collection

IHE staff members wishing to have access to the MSDS for the STARR Collection will need to complete a twostep process, which consists of:

- 1. Obtaining a Single Sign-On (SSO) account and
- 2. Submitting the security agreement form (Institutions for Higher Education) to CEPI, signed by yourself and the Institution Registrar. These forms are posted on the <u>Application Security Forms Web page</u> in the College/University Users drop-down.

You will receive access to the application when both of the above steps have been completed and verified by CEPI. For more detailed information, please refer to the Single Sign-On User's Guide and security forms posted in the Security section of the <u>CEPI IHE Web page</u>. If you experience problems with your account or password, please use the password recovery function at https://sso.state.mi.us/ or contact CEPI at 517-335-0505 or by email at: CEPI@michigan.gov.

Tips for Gaining Access to the MSDS

- Security agreements must be signed by the registrar. CEPI staff will verify that the person listed as the
 registrar on the security agreement form matches the contact listed as the registrar in the membership
 directory on the <u>MACRAO</u> website.
- CEPI staff will also verify that a subscription request has been submitted in SSO and that the information provided on the security agreement form matches the request. Once verified, permission will be granted and the requester will be notified by email.
- The SSO subscription expires after 30 calendar days. Please make sure your security agreement form is sent to CEPI about the same time that you request access to prevent auto-rejection notices.
- Access should be limited to only those persons who will be performing the Request for UIC and STARR
 Collection functions (should range between 2-5 people). STARR IHE users typically include:
 technology group members, admissions staff and/or staff from the registrar's office.

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Removing Access to the MSDS

When authorized users leave your organization, a removal request must be sent in. To access the <u>Removal Form</u>:

- 1. Go to CEPI Web page.
- 2. Under **Privacy and Security** at the bottom of the page, click on **Application Security Forms**.
- 3. Click on User Removal Request Form.
- 4. Follow the instructions for completion of the Removal Request Form.
- 5. Once the form is completed, print and sign a copy, and fax to CEPI at (517) 335-0488.

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XML File Creation

The STARR Collection file must be XML compliant. The <u>CEPI IHE Web page</u> provides the data elements and student population for upload, as well as the XML schema, sample schema, XML Validation Guide, frequently asked questions, timeline, and a CSV-to-XML conversion tool for the Request for UIC and STARR collection.

Your file for upload should first be saved to your desktop or other location on the computer or network so that it can be easily located. The file should not exceed 2GB, and larger files should be separated into smaller zipped files to help ensure faster uploading and processing.

For more information about XML and schema validation, please refer to the MSDS Technical Document.

The World Wide Web Consortium (W3C) is the ultimate authority on XML data types. All collection schemas will reference the W3C definitions for the base data types. Please reference the appropriate collection schema and the W3C to ensure a valid file submission.

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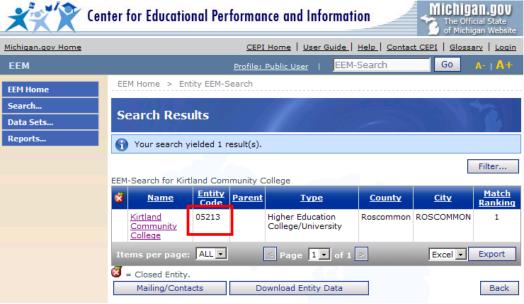
Searching for Your Entity Code

When creating the STARR data file, the IHE Entity Code is required. The Entity code information is used for the SubmittingEntityCode and SchoolFacilityNumber characteristics. If you do not know your entity code, follow this look-up procedure in CEPI's Educational Entity Master (EEM):

1. Go to the EEM website at www.michigan.gov/eem. Enter your institution's name in the **EEM-Search** box. Click **Go**.



2. Your search will bring up the desired entity information within the Entity Code column. The entity code is a five-digit code which may include a leading zero. Please <u>do not</u> cut off the leading zero, as it is a digit in the code.

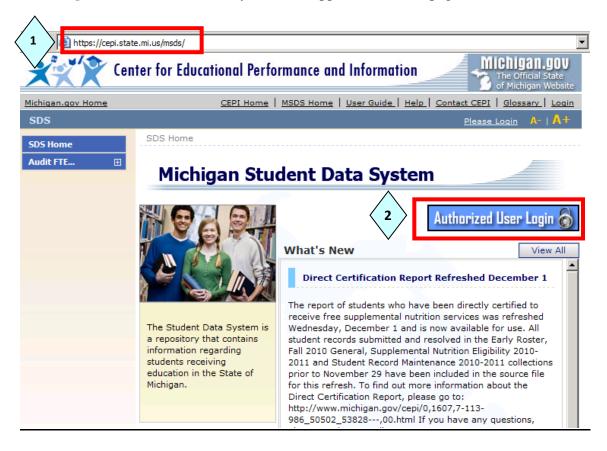


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Logging in to the MSDS

Once you have an SSO account, you can access the MSDS. To access the MSDS:

- 1. Go to https://sso.state.mi.us/.
- 2. Enter your SSO User ID and Password.
- 3. Click the **Login** button. This will take you to the Application Portal page.





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4. If FERPA displays, review the regulations and verify your agreement to comply with the requirements by clicking the button at the bottom of the agreement.

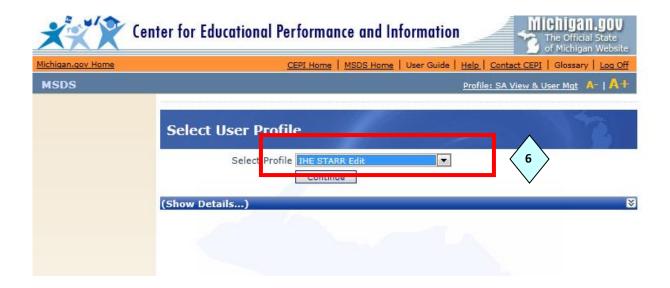


5. Select the Michigan Student Data System (MSDS).



The MSDS provides authorized users with various roles depending on the level of access. For the STARR Collection:

6. Select the appropriate role from the Select Profile drop-down menu and click the **Continue** button. (This only applies to users with multiple roles).



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Navigating the MSDS Home Page

On the next page is a screenshot of the MSDS home page. Various links and menus are available to help users navigate through the MSDS. The link definitions are provided below:



Menu

- <u>CEPI Home</u> The home page for CEPI.
- <u>STARR Home</u> The STARR Collection's home page.
- SDS Home The MSDS application's home page, which is the page prior to login.
- <u>Student Data Submission</u> This screen allows users to access the file upload function and review data they have already submitted.
- <u>Upload File</u> This is a submenu of the Student Data Submission menu, and allows an authorized user to upload the XML student data file.
- <u>Uploaded File Status</u> This is a submenu of the Student Data Submission menu, and allows the authorized user to check the status of uploaded file(s) to determine if the file(s) processed successfully (i.e., passed XML schema validation)
- <u>Data Staging Area</u> This is a submenu of the Student Data Submission menu. If the uploaded file processed successfully, the data are moved to the data Staging Area. This screen allows the authorized user to view uploaded records and where the MSDS conducts field-level data validation.
- <u>Student Data Downloads</u> This screen allows users to download data they have submitted. *This option is not yet available for the STARR Collection*.
- <u>Search</u> This screen allows an authorized user to search for individual students using all or portions of the four core fields (first name, last name, date of birth and gender) and/or all digits in the UIC.

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CEPI Help Desk

Please visit <u>CEPI IHE Web page</u> for the most up-to-date information on the STARR Collection. If you have any questions, please email CEPI customer support at <u>CEPI@michigan.gov</u>. Email provides written documentation and allows the quickest, most efficient method for receiving a response. If email is not an option, contact customer support via telephone at (517) 335-0505, option 3. In either case, please include: 1) your name, 2) the application you need help with (in this case it is the MSDS STARR Collection), 3) your telephone number, including area code and extension, 4) your email address and 5) your specific question(s).

To receive official notices from CEPI regarding the STARR Collection, sign up for GovDelivery Mailing List.

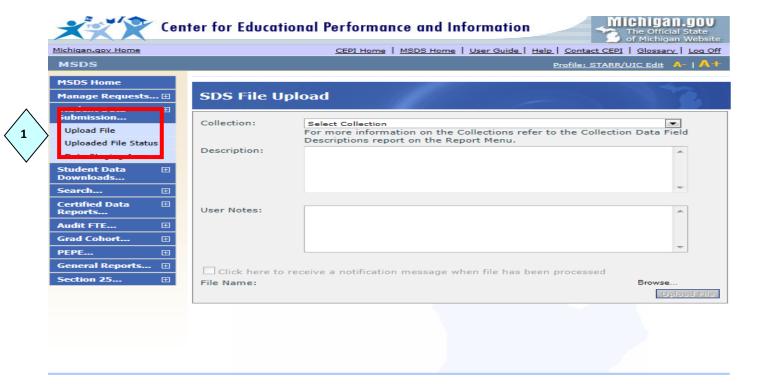
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Submitting Records in the STARR Collection

Your XML file of student record data must be uploaded so that the MSDS can validate the data.

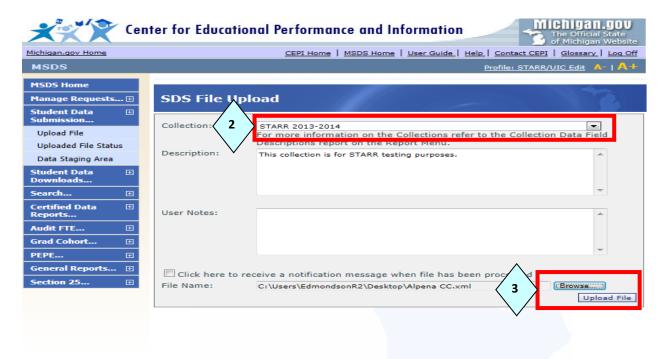
File Upload

1. From the MSDS homepage, click on the **Student Data Submission** tab from the left-hand menu. This will bring up several sub-menus. Click on the **Upload File** link. This will take you to the File Upload screen.

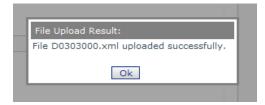


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- 2. Select the **STARR** Collection for the current school year from the drop-down menu. In the text box, add any user notes specific to the file, if desired.
- 3. Select the **Browse** button to choose the file to upload. Click on the file name and click "Open" or double click on the file name to populate it into the File Name text box. Click the **Upload File** button.



Once processed, you may receive a message indicating that your file was "uploaded successfully." Receiving this message does not mean it passed file-level validation.



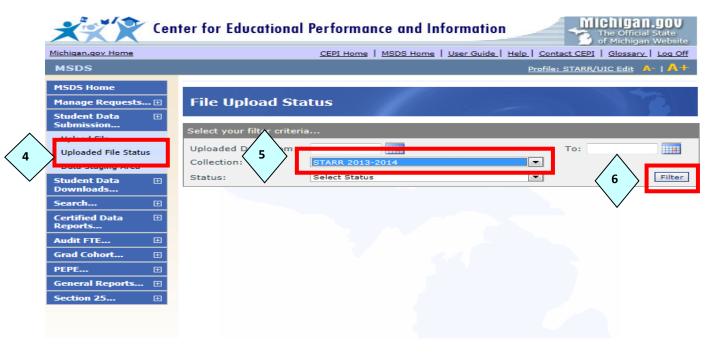
It is important to note how validation occurs in the MSDS.

- a. File-Level Validation (File Upload) Although this does happen when the file is uploaded, ideally you should first validate your file offline. System performance is directly related to the number of files that are uploaded that do not pass file-level validation. Many users have had success using an XML Validation Tool. Please note that an XML Validation Tool will only inform the user if the file passes file-level validation. File-level validation ensures that the file meets the schema.
- b. Field-Level Validation Once a file is uploaded and passes file-level validation, the MSDS processes the Field-Level Validation. Once a file is accepted, it is loaded into a Staging Area. Field-level validation may result in field-level errors/warnings.
- c. Collection-Level Validation (Quality Review) Once errors/warnings are corrected in the staging area, Quality Review should be run. Quality Review is the final step prior to certification. This process checks the entire file for duplicate students.

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Checking the File Status

- 1. To check the status of your uploaded file to see if it was accepted or rejected due to file-level validation errors, click **Uploaded File Status** tab from the left-hand menu.
- 2. Select the **STARR** Collection from the drop-down menu.
- 3. Click the **Filter** button. This will take you to a screen showing the results of an uploaded file.

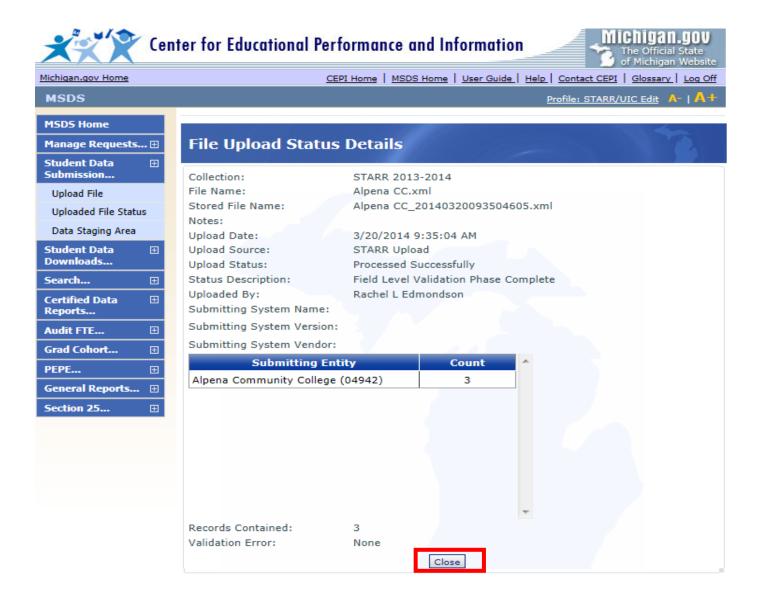


View the Status column to determine if your uploaded file was processed successfully. If the column reads "Processed Successfully," the data have been transferred to the data Staging Area. This screen also shows all files that have been uploaded by your entity that may have been uploaded by a different authorized user. If you wish to view the details of the upload status, click on the File Name.



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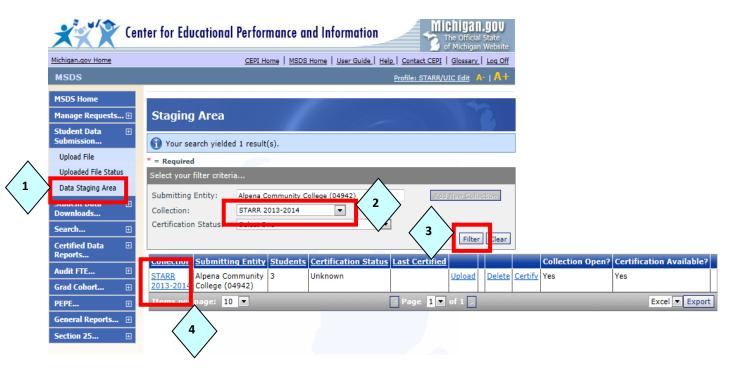
1. Clicking on the file name will bring up the File Upload Status Details screen, which looks similar to the one below. This screen displays details such as if the file was uploaded successfully or if there were issues with the upload. If the file does not process successfully, the user needs to correct the file-level validation issues and re-upload the file. To exit this screen, click on the **Close** button. The file upload status will not refresh automatically. You will have to either refresh your page or go out of this screen and back in to see the status change.



Reviewing Records

After viewing the file upload status and confirming that your file processed successfully, you should next open the data Staging Area. The Staging Area is where:

- The file goes through field-level validation and the UIC matching process.
- The user can view which records resulted in a new UIC being generated, a match found or requires resolution.
- The user can view field-level errors and warnings.
- The user can correct field-level errors.
 - 1. To view the records in the Staging Area, click on the **Data Staging Area** tab from the left-had menu.
 - 2. In the Staging Area screen, select the **STARR** Collection in the Collection drop-down box.
 - 3. Click the **Filter** button.
 - 4. Clicking on the Collection Name will take you to the STARR Staging Details screen.



Your results will have the following link options:

- a. Collection Link
 This link will display if there is a staging area for the STARR collection.
- b. Upload LinkThis link will display if the collection is open.

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c. Delete Link

This link will display if there are records in the staging area and the collection is open.

d. Certify Link

This link will display if there are records in the staging area that have not been certified and the collection is open.

e. Decertify Link

This link will display if there are records in the staging area that have been certified and the collection is open.

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STARR Staging Detail

The STARR Staging Detail screen displays the errors and warnings with the uploaded records and is broken into the following five areas:

1. Validation Status (results of field-level validation)

Lists the number of records where errors exist, records with warnings and records with no errors or warnings. Clicking on the hyperlink of the validation status will filter those records with that status. The records will display at the bottom of the screen.

2. Validation Reports

Allows you to download reports that give details on which records have errors or warnings.

3. UIC Resolution Status (results of UIC matching)

Lists the number of records which require resolution, that resulted in a match found and that resulted in a new UIC being generated. Clicking on the hyperlink of the UIC resolution status will filter those records with that status. The records will display at the bottom of the screen.

4. UIC Resolution Reports

Allows you to download reports that give details on which records require resolution, that resulted in a match found and that resulted in a new UIC being generated.

5. General Reports

Allows you to download reports that give details of all students UICs and an indication of whether the assigned UIC in the STARR Collection is different from the submitted UIC.

6. Student Records

Individual records are displayed at the bottom of the screen. Users can filter the list of records by Validation Status, UIC Resolution Status or by students' last name. Users can also filter the list of students by clicking Filter.

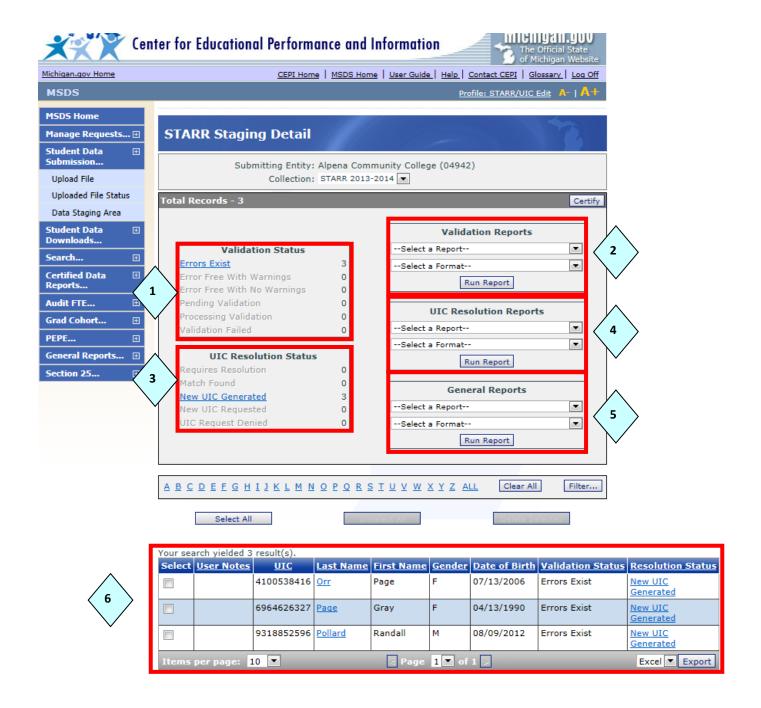
- a. To delete a student record from the STARR Staging Detail screen, check the box beside the student you wish to delete, then click on the Delete button. A message will appear asking if you are sure you want to delete the record. Click Yes or No.
- b. You can sort the student list by clicking on any of the column headers (User Notes, UIC, Last Name, First Name, Gender, Date of Birth, Validation Status and Resolution Status).
- c. Click on a student's last name hyperlink to go to the STARR Student Details screen.
- d. Click on a student's resolution status hyperlink to go to UIC Resolution screen.

7. Filter

a. Click on any letter of the alphabet to filter the list to show only students whose last names begin with that letter.

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b. Click on the Filter button to find a specific student or to filter by Validation Status or UIC Resolution Status.



Validation Status (results of field-level validation)

There are six validation statuses in the STARR Staging Detail screen. Below are all the possible validation statuses you may see with a description of each:

Status Message	Description
Errors Exist	Field-level validation errors must be fixed before certification.
Error Free with Warnings	Field-level validation errors should be reviewed to determine if changes are warranted.
Error Free with No Warnings	No field-level validation errors or warnings exist for the record
Pending Validation	The record has not gone through field-level validation.
Processing Validation	The record is currently being processed for field-level validation.
Processing Failed	Processing of the record failed and should be reported to CEPI.

- a. If your records fall into any of those statuses, the Status Message will be hyperlinked and there will be a number to the left letting you know how many records are affected.
- b. Click on the Status Message hyperlink, and the records will appear at the bottom of the screen.
- c. Clicking on the last name of a student will take you to the STARR Student Detail screen.
- d. On the STARR Student Detail screen you can see errors or warnings for that student record on the bottom of the screen.
- e. You must correct all errors before you can Certify your collection.
- f. You should also review warnings to make sure the data are correct. The system generates warnings when the data are outside of the expected parameters for the STARR field, but may still be correct. Warnings will not prevent you from certifying a collection.

UIC Resolution

UIC Resolution is the process of ensuring that each student is correctly associated with a particular UIC. The MSDS application matches every submitted record against the Student Master Record table. The fields used for matching include the First Name, Last Name, Date of Birth and Gender fields. Additional fields that the MSDS uses for matching are the UIC, Last Name Suffix and the Middle Name/Middle Initial fields, if they are provided in the submitted record. The fields in the submitted record are compared against the corresponding fields of records in the Student Master Record table to determine if it is the same student or not. Based on the fields used for matching, a score is calculated that determines how closely the submitted record matches to a record(s) in the Student Master Record table. The calculated score determines if a record requires resolution. Records that require resolution necessitate user intervention to determine which UIC should be associated with a student's record. If no match is found, the system automatically creates a new UIC.

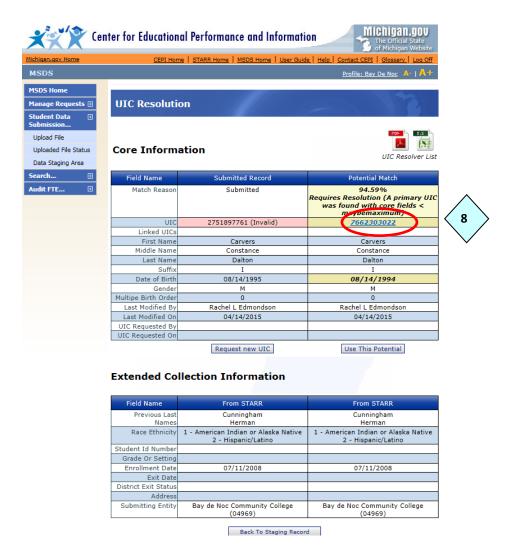
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To determine which records require resolution:

- 1. Click Student Data Submission and Data Staging Area from left navigation bar.
- 2. Select the **IHE Request for UIC Collection** from the drop-down menu.
- 3. Click the **Filter** button.
- 4. Click on the collection name link.
- 5. Click **Requires Resolution** from UIC Resolution Status section of **STARR Staging Detail** page.



- 6. Scroll to bottom of page and click the **Requires Resolution** link to the right of the student's name.
- 7. Review the student records presented as possible matches. All possible matches will appear. This could be a single match or several.



- 8. Click the UIC hyperlink of the possible match record to review the student's history.
- 9. If you determine that a possible match is your student, click "Use this Potential."
- 10. If you determine that your student is a different student than the student presented as a possible match(es), click "Request New UIC."

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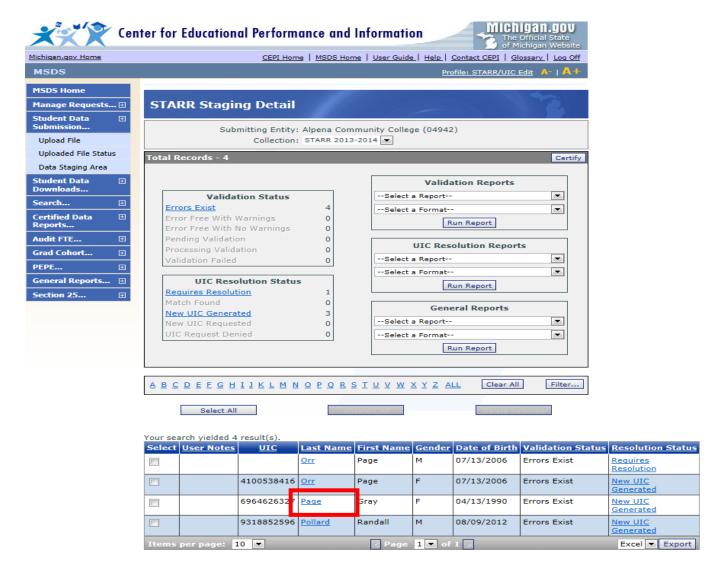
- 11. Enter reason for new UIC request in the UIC Request Comments pop-up box. For example, if this is a new student entering a Michigan school at the college level is it because they moved from out of state, went to a private school or were home-schooled? Be sure to enter the justification as to why you are requesting the new UIC and the student does not already have one assigned to them.
- 12. Click Submit.
- 13. Requests are placed in a queue that the system administrator reviews and approves or denies based on the information submitted in the request. Typical turn-around time is one to two business days. You may review the status of your request on the Manage Requests for UIC screen or on the STARR Staging Detail screen.



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Correcting Errors and Warnings

Once the file has been added to the STARR Staging Detail screen, click on a student's **Last Name** link. This will display the STARR Student Detail screen.

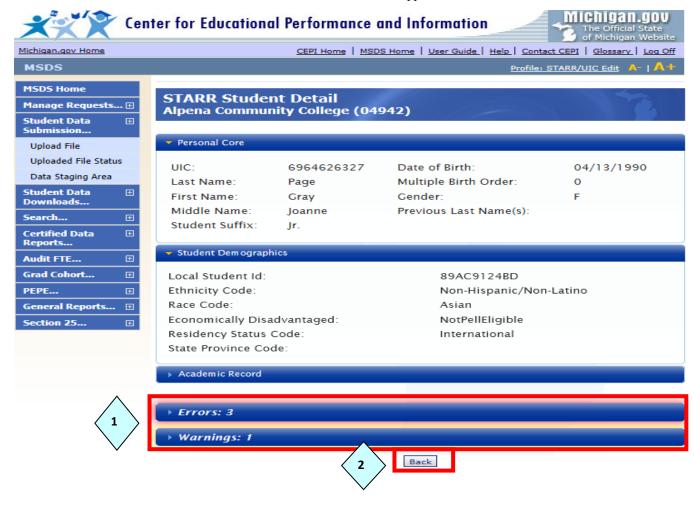


The STARR Student Detail screen shows the details of the submitted student record.

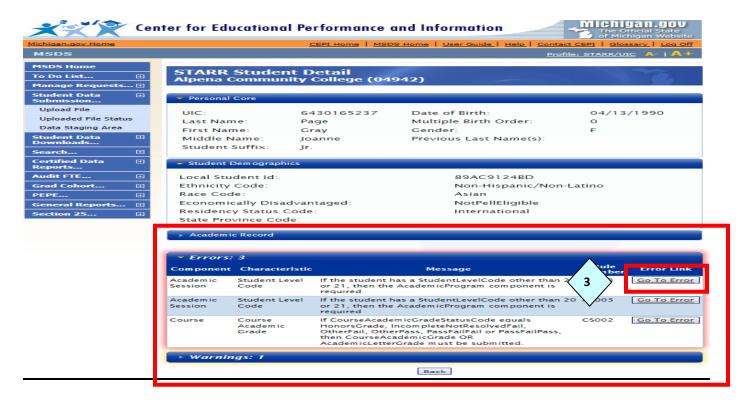
- 1. If errors or warnings are encountered, they will appear below the student information. Click on either the Error or Warnings link to view them.
- 2. Click the **Back** button to return to the STARR Staging Detail screen.

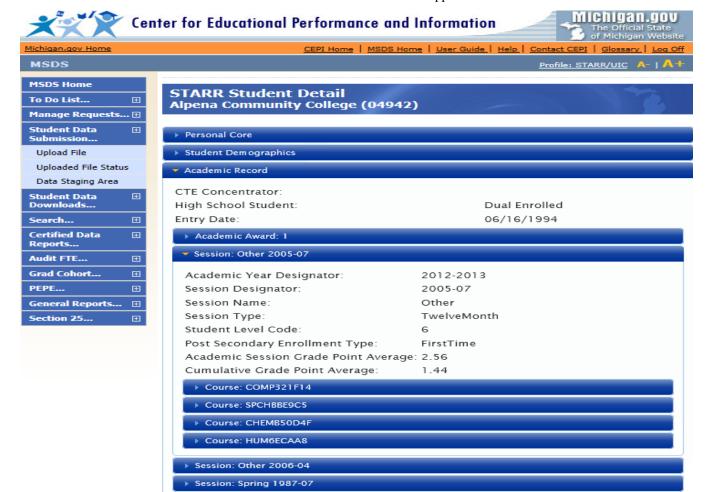
Correct all errors and review warnings and make pertinent corrections in your Student Information System (SIS) and upload your file again.

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3. Click the Go To Error hyperlink to review where the error occurred in the student's record.

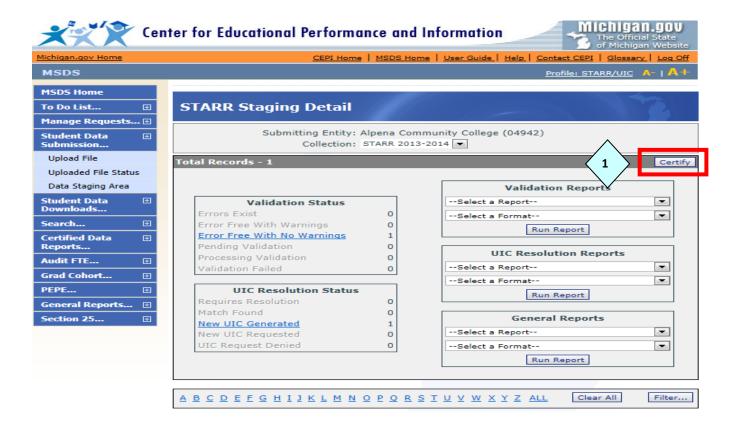




Quality Review – Certify Collection

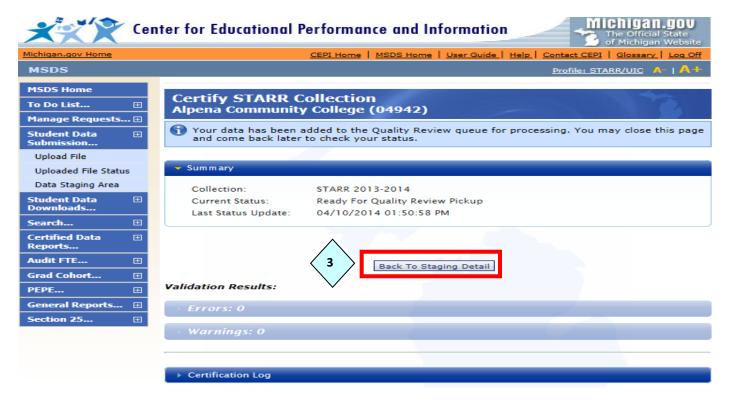
Quality review can be done at any time. It is important to note that new errors could display during the Quality Review process. This is because the Staging Area is looking at <u>field</u>-level validation while the Quality Review process is looking at <u>collection</u>-level validation. After all errors have been corrected, the collection can be certified by clicking on the Certify button.

1. From the STARR Staging Detail screen, click the **Certify** button. Or from the Staging Area screen, click on the **Certify** link.

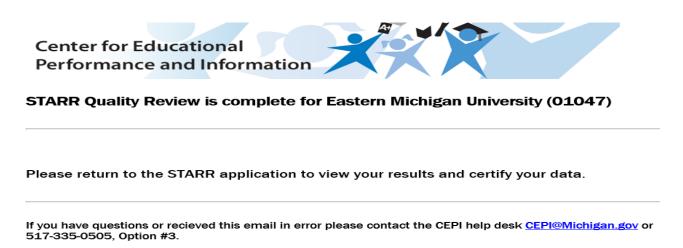


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- 2. Click the Certify button to bring up the Certify STARR Collection screen.
- 3. This screen does not automatically refresh. After you run Quality Review click on the Back to Staging button and then return back to the Certify STARR Collection screen to resume certifying the collection.



4. Once the Quality Review process has been complete, the following automatically generated email should be received:



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- 5. After all errors have been corrected and all warnings have been reviewed and corrected if necessary, the collection can be certified.
- 6. Check the box to confirm that the information submitted is valid and correct.
- 7. Click the Certify Data button to Certify the collection.



8. Last, the following message will be received:



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Decertify Collection

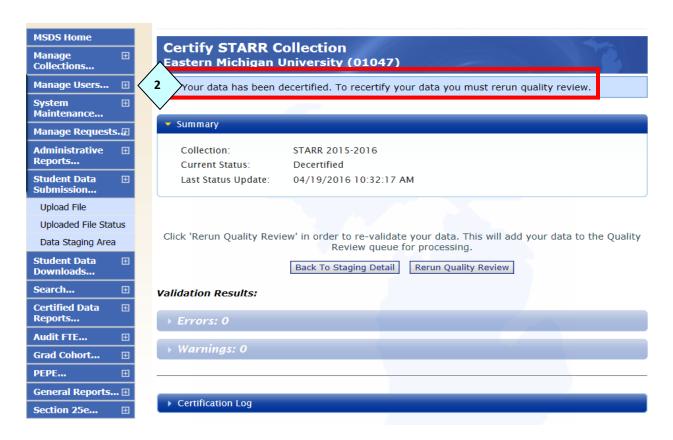
Once certified, the STARR Collection can be decertified if the collection requires the input of more data, changes to data or the removal of inaccurate data. This decertification process will be available until the certification end date. Decertifying does not delete/remove records from the collection. It simply removes the status of the collection's official submission to the State. Once decertified, the collection will again be open for file upload, manual addition or deletion of records, editing of records and certification.

A collection that has been decertified must go through Quality Review and the certification process again for it to be considered officially submitted to the State.

1. From the Certify STARR Collection screen click on the Decertify Data link.



2. The following screen will be shown, indicating the collection decertification process is complete:



3. Once a collection decertification is complete, the following automatically generated email should be received:



STARR Quality Review is complete for Macomb Community College (05250)

Please return to the STARR application to view your results and certify your data.

If you have questions or recieved this email in error please contact the CEPI help desk <u>CEPI@Michigan.gov</u> or 517-335-0505, Option #3.

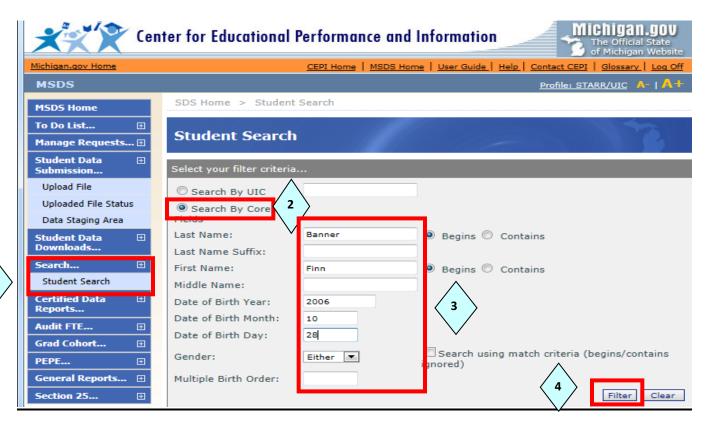
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Additional MSDS Functionality

Student Search

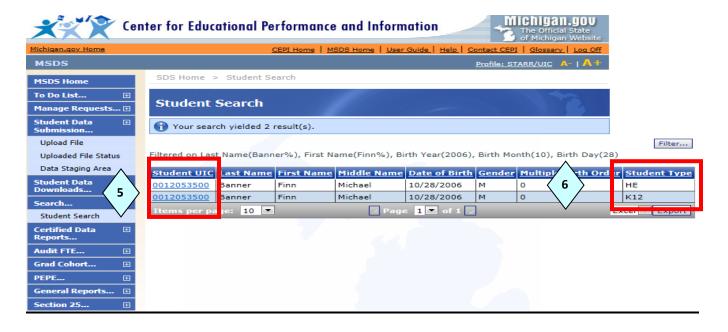
Use the MSDS Student Search feature when you want to look up individual students to locate their UICs. To perform a student search:

- 1. Click on the **Search** tab at the left-hand menu. This will bring up a sub-menu. Click on the **Student Search** tab. This will take you to the Student Search screen.
- 2. Click the radio button next to **Search By Core Fields.**
- 3. Type in all or portions of the core fields.
- 4. Click on the **Filter** button. This will bring up the search results for the student. *Note:* No search results will appear if no matches were found in the system. The search results may also bring up multiple matches. If you discover that there are multiple UICs for your student, the UICs should be linked. See the IHE Request for UIC Collection User Guide section on linking UICs for these instructions.





- 5. The Student Type identifies if the student has a Secondary (K12) and/or a Higher Education (HE) record.
- 6. Click on the hyperlinked UIC for the student. This will take you to the Student Details screen to view detailed information on the student.



A screen similar to the one below will display for the student.

